

16. (5th Amendment) In a metal etch tool for removing post-RIE polymer rails formed on a Al/Cu metal line of a semiconductor structure, the improvement comprising:

[I.] an integrated metal etch tool interfaceable with:

(a) vacuum chamber means to [provide a mixture of etching gas/acid neutralizing gas of HF/NH₃ to said structure to] form a water soluble residue material of sidewall polymer rails [left behind] on Al/Cu metal line from [the] a RIE process; and

(b) strip chamber means to strip down stream etched [for stream removal of] photo-resist from said structure [by chemical downstream etching or plasma].

CORRECTED VERSION OF THE AMENDED CLAIMS

13. (5th Amendment) In a metal etch tool for removing post-RIE polymer rails formed on a Al/Cu metal line of a semiconductor structure, the improvement comprising:

an integrated metal etch tool interfaceable with:

a) strip chamber means to strip photo-resist of a semiconductor composite structure subsequent to a RIE to limit thickness of sidewall polymer rails;

b) vacuum chamber means to chemically modify sidewall polymer rails to form a water soluble residue material of sidewall polymer rails left behind on a Al/Cu metal line from the RIE process; and

c) deionized water rinse chamber means to rinse soluble material.

16. (5th Amendment) In a metal etch tool for removing post-RIE polymer rails formed on a Al/Cu metal line of a semiconductor structure, the improvement comprising:

an integrated metal etch tool interfaceable with:

(a) vacuum chamber means to form a water soluble residue material of sidewall polymer rails on Al/Cu metal line from a RIE process; and

(b) strip chamber means to strip down stream etched photo-resist from said structure.